

CLAIMS

1 A method of checking configurations on a network, the method comprising the steps
of

5 for at least one managed device on the network, accessing configuration information for a
port and its respective associated link to another device,

10 applying a series of interrogations to the configuration information relating to an aspect of
configuration to determine whether the port and associated link conforms to at least one
predetermined configuration criterion,

15 and when the configuration does not conform, providing an indication of the non conformity
that has been determined

2 A method according to claim 1 including repeating the procedure for another port
and respective link on the device

3 A method according to claim 1 or claim 2 further including applying a plurality of
20 series of interrogations to the port and link relating to different aspects of configuration

4 A method according to any preceding claim in which the series of interrogations
relates to one of duplex, trunk link, link speed and resilient link configurations

25 5 A method according to any preceding claim in which the indication of the detected
non conformity includes a display of information on the configurations and of the change
required to establish conformity

6 A method according to claim 5 in which the non conformity is one for which an automated modification is possible and an automated modification of the configuration to establish conformity is offered for selection

5 7 A method according to any preceding claim in which the link comprises a remote connection and the configuration information relates to the remote connection

8 A method according to any preceding claim in which the configuration information relates to a property of an interconnecting material that comprises the link

10 9 A method according to any preceding claim in which the accessing of the configuration information is implemented externally of the network

10 10 A method according to any of claims 1 to 8 in which the accessing of the configuration information is implemented in a device on the network

15 11 A method according to any of claims 1 to 8 in which the accessing of the configuration information is initiated remotely

20 12 A method according to any preceding claim in which the interrogations determine whether the port and the port at the other end of the link are running half or full duplex mode and if both said ports are not running at the same duplex mode an indication of non conformity is given

25 13 A method according to any preceding claim in which the interrogations determine whether the link is running at half duplex, and if so, when the link is to another managed device whether the ports at both ends of the link are capable of full duplex and if so an indication of full duplex capability is given

14 A method according to any preceding claim in which the interrogations determine whether the link is running at half duplex and if so, and the other device attached to the link is not managed, an indication is given of a potential inefficiency

5 15 A method according to any preceding claim in which, when there is a managed device at the other end of the link, the interrogations determine whether the link is a trunk link, and if so whether each port in the trunk is enabled, whether there are equal numbers of ports at each end of the trunk link and whether all ports have an active link and when any of these are NO an indication is given

16 A method according to any preceding claim in which, if the interrogations indicate that there are any free ports on both devices that could be used as part of a trunk line, an indication is given

15 17 A method according to any preceding claim in which the interrogation determine whether the link is a trunk link, and when the link is not a trunk link the interrogations determine whether both devices are trunk link capable and whether there are free ports on each device and if so an indication is given

20 18 A method according to any preceding claim in which if the device at the other end of the link is not managed the interrogations determine whether the link is a trunk link and if so provides an indication of a misconfiguration

25 19 A method according to any preceding claim in which the interrogations determine whether auto-negotiation is switched on at both ends of the link and if so whether the link is running at maximum speed, and if not and the device at the other end of the link is managed an indication is given to check the physical connection between the two devices for correct type

20 A method according to any preceding claim in which the interrogations determine whether the port has been set to run at a fixed speed less than its maximum capability or at a fixed speed but is running at optimum speed, and in either instance provides an indication to turn on auto-negotiation

21 A method according to any preceding claim in which the interrogations determine whether auto-negotiation is switched on and if so whether the link is running at maximum speed, and if not and the device at the other end of the link is not managed an indication to check the unmanaged device for upgrade is given

22 A method according to any preceding claim in which the interrogations determine whether the link is a resilient link and if so whether the ports at each end of the link both form part of a resilient pair on their respective devices, and if so an indication of misconfiguration is given

23 A method according to any preceding claim in which the interrogations determine whether the standby port of a resilient pair is on the same unit as the main port and if so whether the device contains multiple units, and if so an indication to move either the main port or the standby port to another unit is given

24 A computer program comprising program instructions for causing a computer to perform the method of any of claims 1 to 23

25 A computer program comprising program instructions for accessing configuration information relating to a plurality of ports and respective associated links of a plurality of devices on a network,

and for applying a series of interrogations to the configuration information

5.

27 A networked device controlled by a method according to any of claims 1 to 23

28 A network controlled by a method according to any of claims 1 to 23